



*Compound Semiconductor Solutions
from RF to Lightwave*

穩懋半導體

20[📶]
YEARS
of
III-V INNOVATION

穩懋半導體公司簡介

2020年8-10月



免責聲明

- 本資料可能包含對於未來展望的表述。該類表述是基於對現況的預期，但同時受限於已知或未知風險或不確定性的影響。因此實際結果將可能明顯不同於表述內容。
- 除法令要求外，公司並無義務因應新資訊的產生或未來事件的發生主動更新對未來展望的表述。

- 市場概況
- 技術藍圖
- 營運策略
- 營運結果與展望
- Q&A

市場概況

5G + Wi-Fi 6



Infrastructure



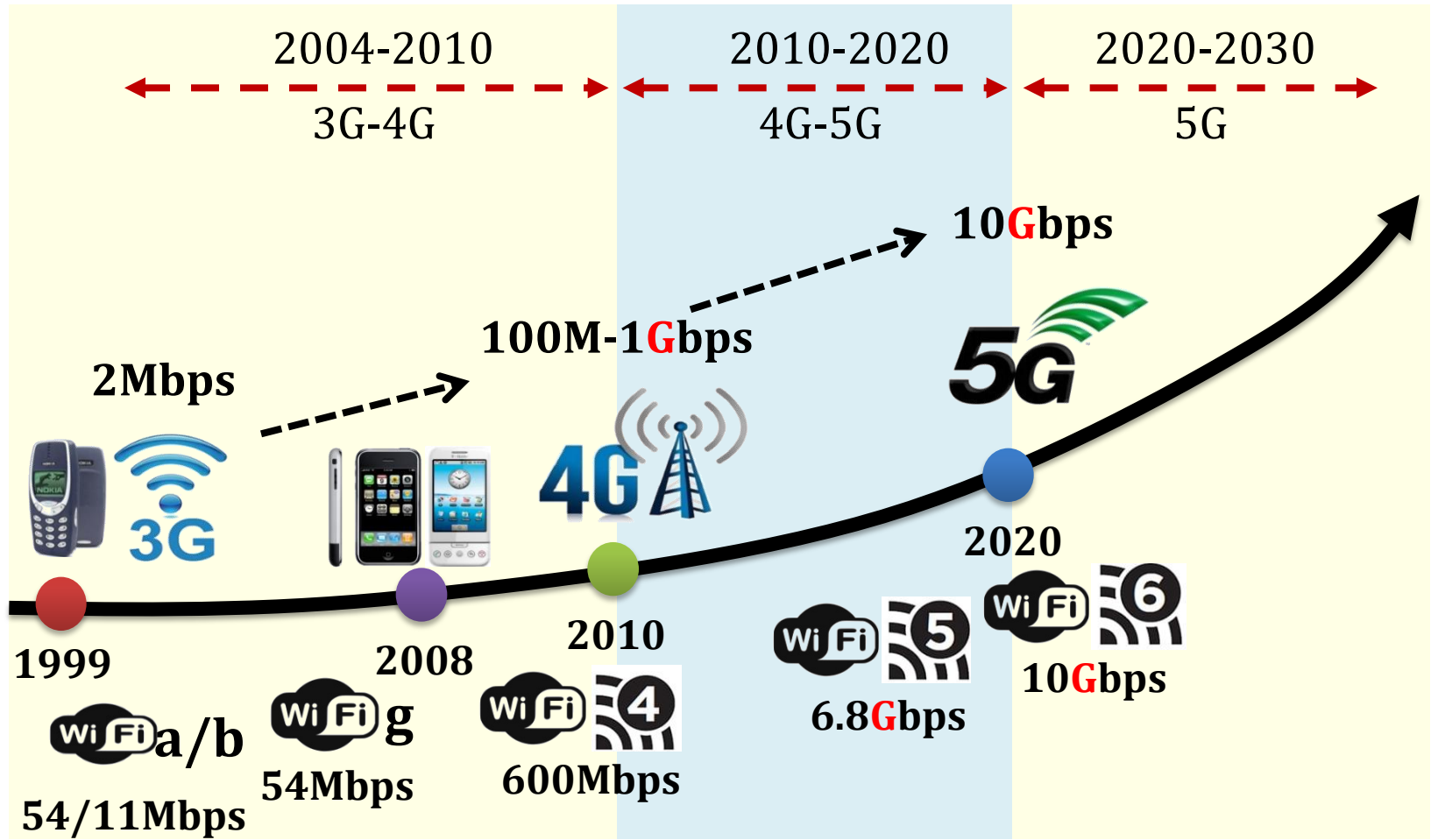
Optical Devices



Performance(性能)

超高速

在**無線通訊**的必要性，與化合物半導體特性優勢相符



Y2019-20

商用建設期

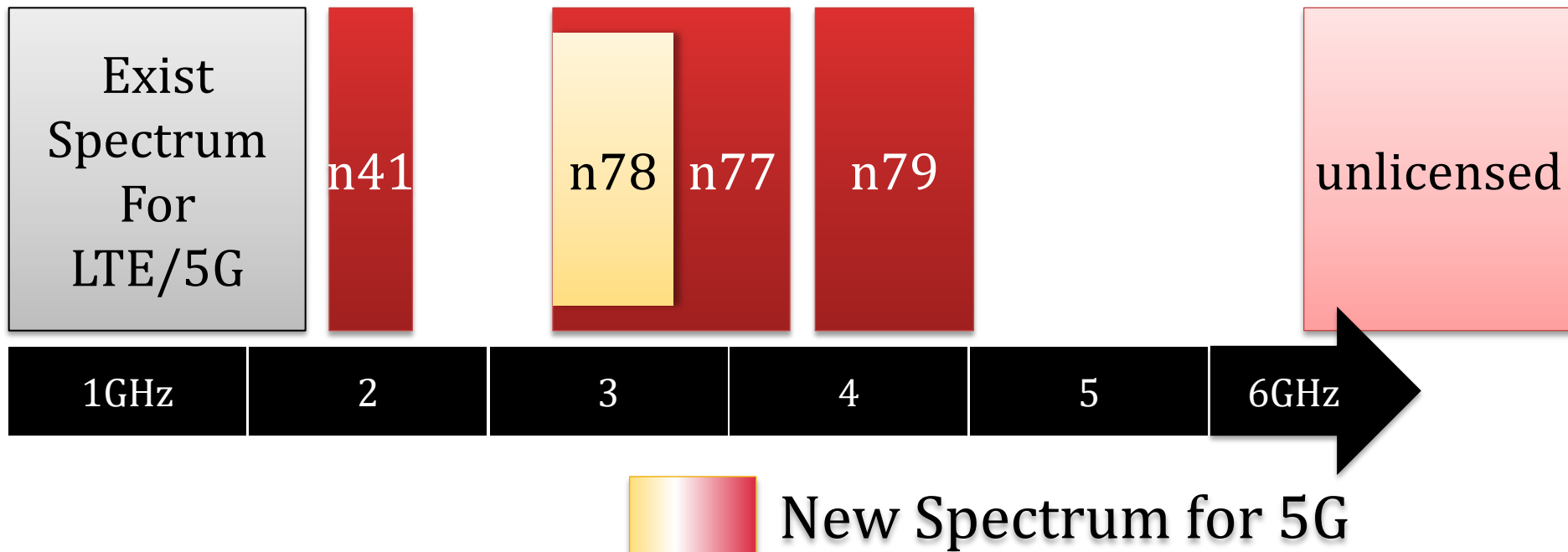
Y2021-25

需求爆發期

	Mobile Device	Infrastructure/CPE
Sub-6GHz	<ul style="list-style-type: none"> • GaAs HBT 	<ul style="list-style-type: none"> • GaN HEMT • GaAs pHEMT
mmWave	<ul style="list-style-type: none"> • Integrated compound semi technologies 	<ul style="list-style-type: none"> • GaN HEMT • GaAs pHEMT

- 5G sub-6GHz (<6GHz) spectrum bands for ubiquitous network coverage
- 5G mmWave (~30GHz) likely for fixed wireless access as a start followed by extreme mobile broadband in the longer term

5G Sub-6GHz 頻譜



(1) New frequency bands for 5G

(2) MIMO: n41, n77, n78, and n79

(3) Additional 5G PA (Reform existing 4G Frequency bands)



Wi-Fi 6 產品應用擴展 以及 Wi-Fi 7 的發展

- Wi-Fi will be upgraded from 802.11ac to 802.11ax (Wi-Fi 6), from flagship to mid-range phones
 - Faster throughput
 - Higher network efficiency
 - Better in dense environments
- 802.11be (Wi-Fi 7)
 - Extreme high throughput
 - Extend to 6GHz frequency band

智慧
手機

企業
應用

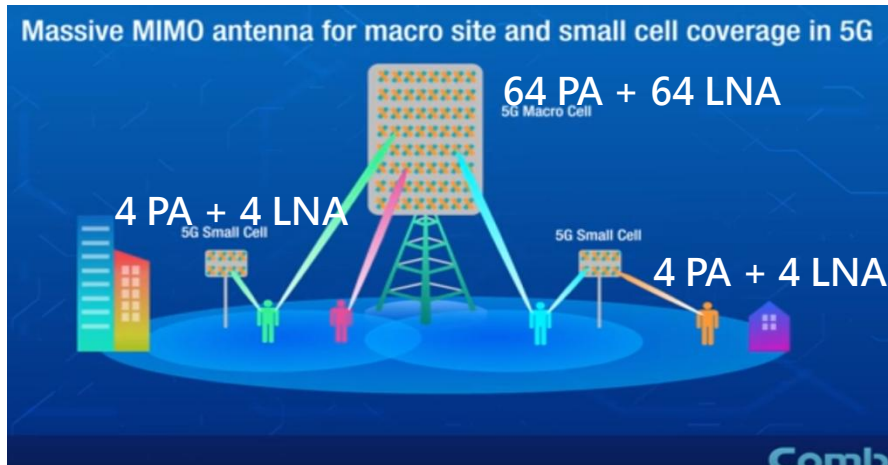
行動
裝置

● RF Device Inside Macro & Small Cell Sector

- The high performance of compound semiconductors is the better choice for PA and LNA on 5G base-station.
- More than 100M transceivers in 2020.

● Satellite Communication Era is Coming

- More than 6,500 small satellites (<500kg) in orbit by 2027.
- Comms. application will be the key growth engine for satellite.

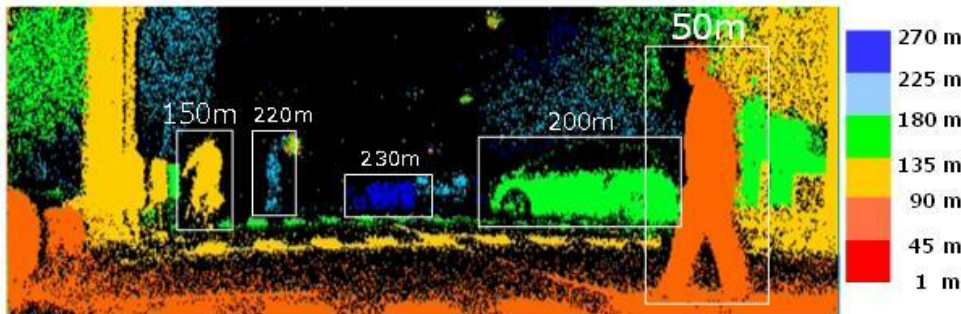


- **Structure-Light demand keep very strong**
- **ToF for 3D sensing applications will keep growth**
 - Production was started since 2H2019
 - Multiple customers use ToF for both front and world facing applications

World Facing AR



Autonomous



Gesture Recognition



● 光電元件

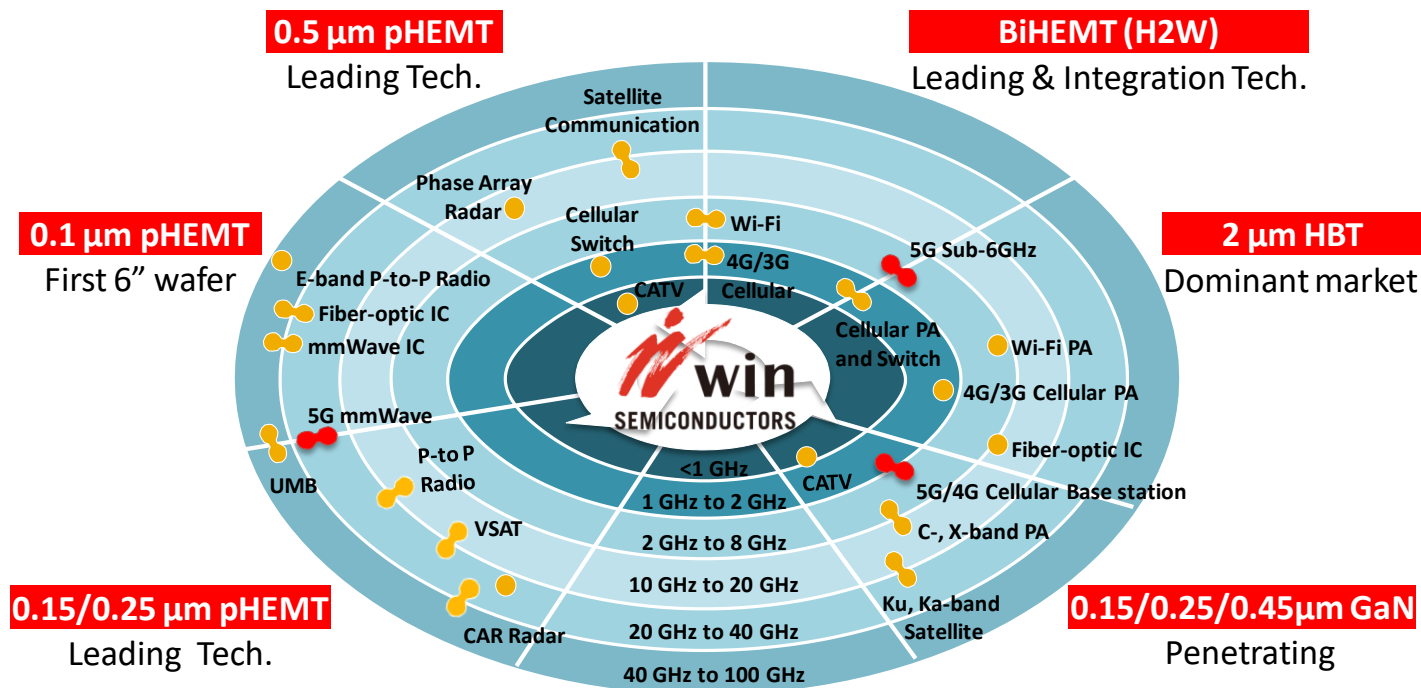
- Data center interconnect, or metro/long-haul coherent transmission
- Proximity/Light sensor



- **More and more customers engagement and will enter production stage soon**

技術藍圖

The most comprehensive technology portfolio in industry enables customers to develop optimized products for a wide range of applications



- Dominant market share for high-performance HBT used in LTE PAs
- Leading BiHEMT technology for advanced integrated FEM
- First and only foundry worldwide to commercially develop 0.1μm pHEMT on 6" GaAs wafer

- Industry leading 0.15–0.25μm pHEMT technology
- Supports broad range of products such as PAs (from 50MHz–100GHz), switches, and fiberoptic IC
- Developing GaN for high power devices (4/5G base station)

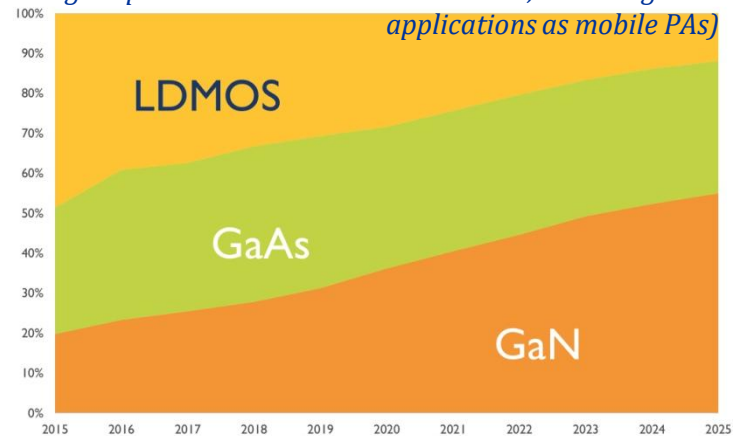
4/5G基礎建設 – 穩懋運用實例

Ultra high frequency semiconductor technology provider!

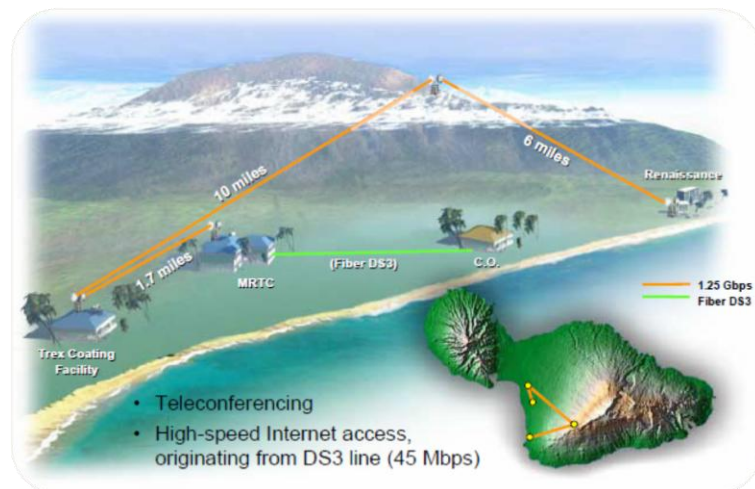
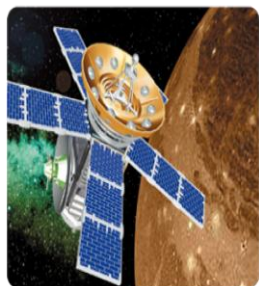
- Wireless infrastructure
- Satellite communications
- Fiberoptic communication
- ADAS

RF power device market, in value – breakdown by technology

(Only considering RF power semiconductors above 3W, excluding such applications as mobile PAs)



Source: Yole Développement



Invest in capacity to capture demand growth and improve margins through product remix

Scale & Remix

Technology Leadership

Invest in technologies to maintain competitive edge and sustain leadership

Leverage on technology and manufacture expertise to lift efficiency and drive cost down

Cost & Efficiency

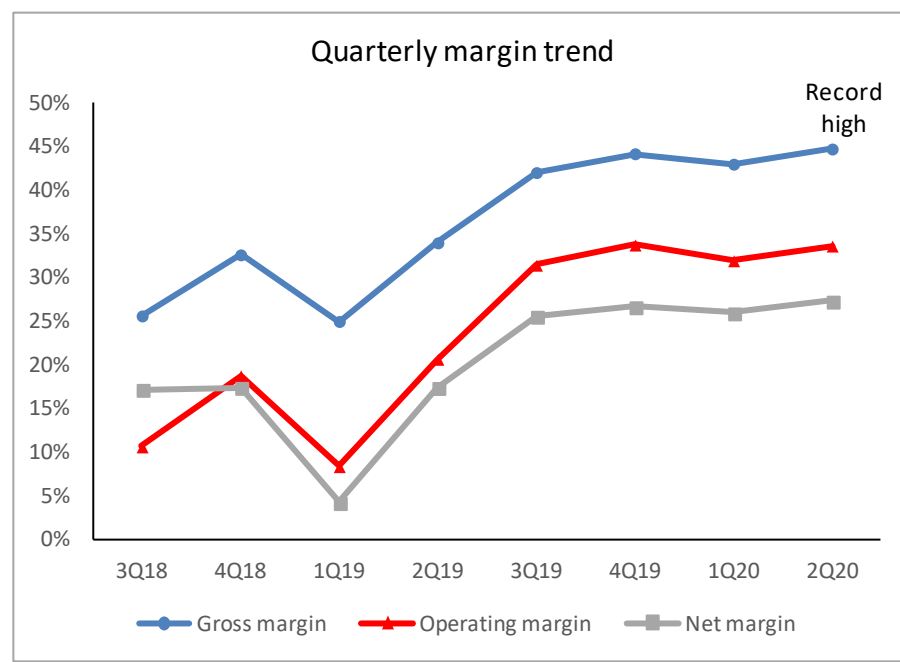
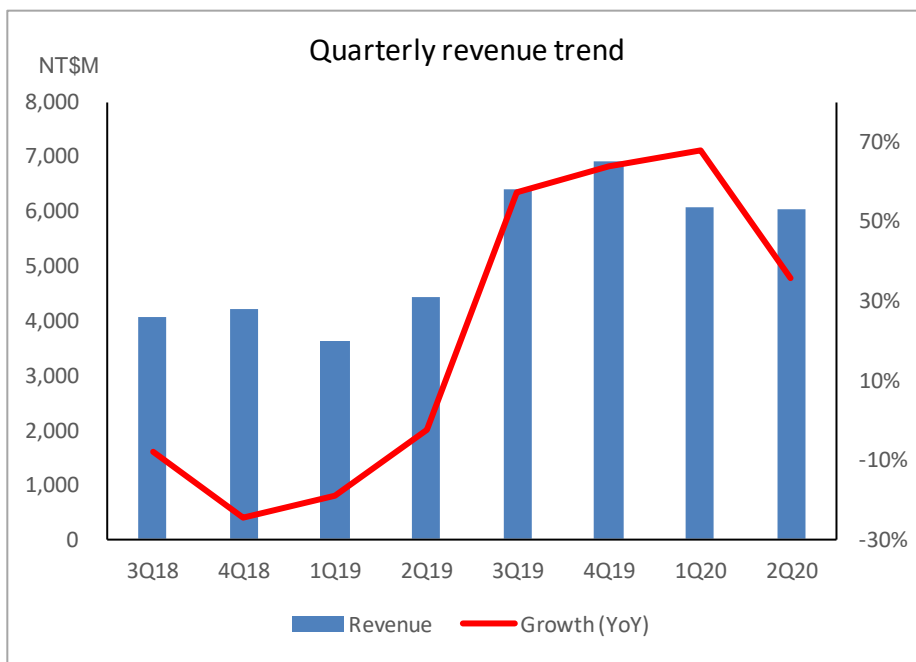
Customer Diversification

Grow and acquire new customers in existing and new markets to diversify customer base

營運結果與展望

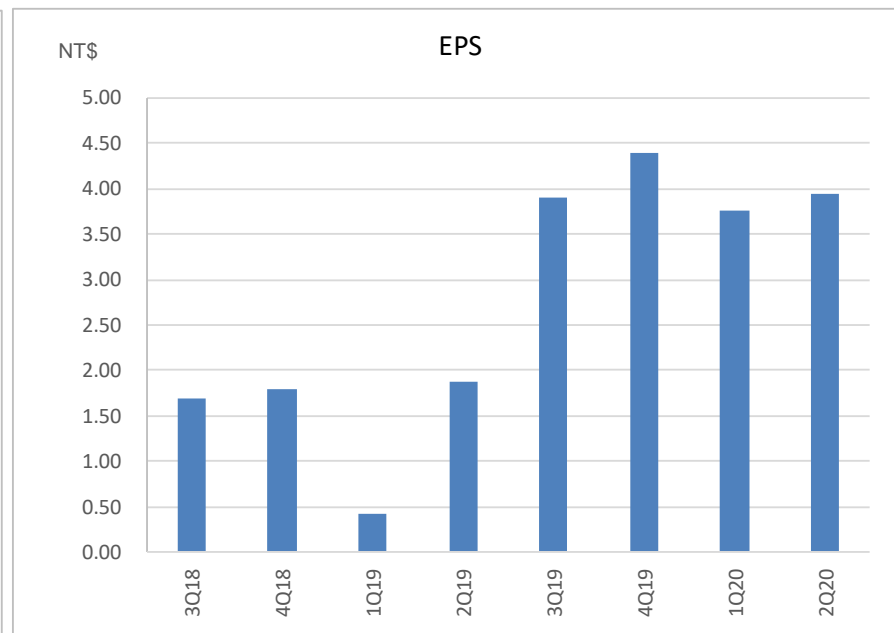
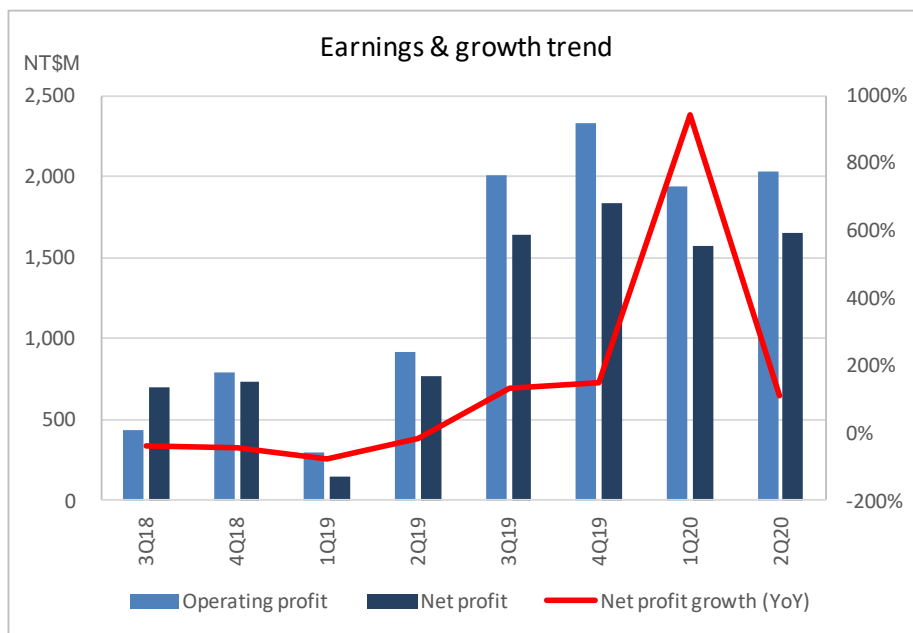
營收及毛利趨勢

- 第二季營收為新台幣60.48億元，較前一季減少0.4%，較去年同期增加36%。
- 第二季產能利用率仍維持高檔且產品組合更佳，營業毛利率與營業淨利率因此分別較前一季增加1.8及1.7個百分點，來到44.8%及33.6%。



Source: company.

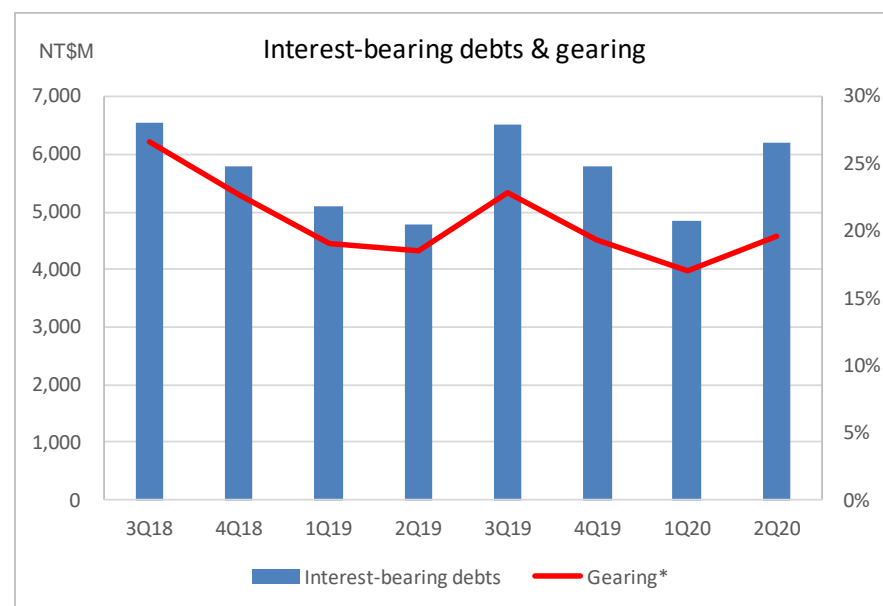
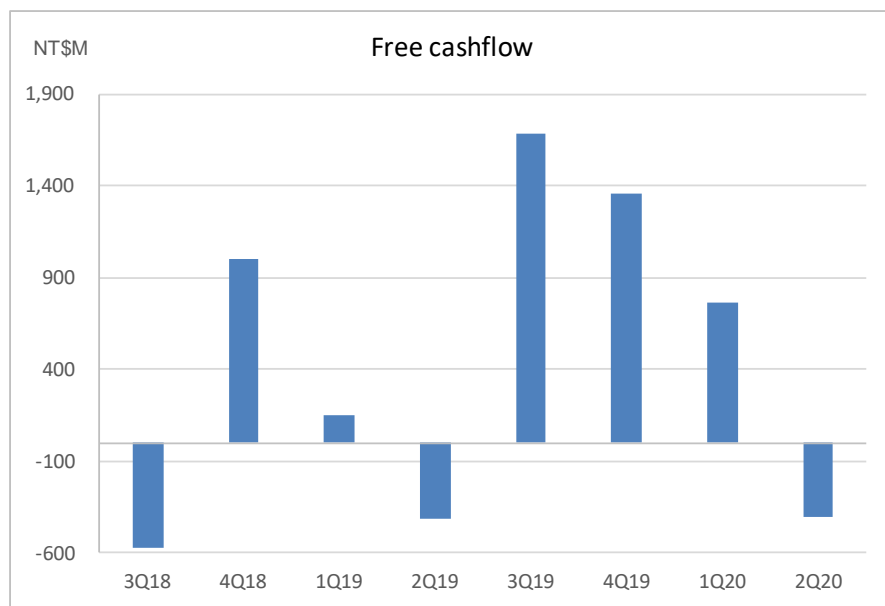
- 第二季淨利為NT\$16.51億元，較前一季增加5%，較去年同期增加113%；
第二季EPS為NT\$3.94元，前一季EPS為NT\$3.76元。



Source: company.

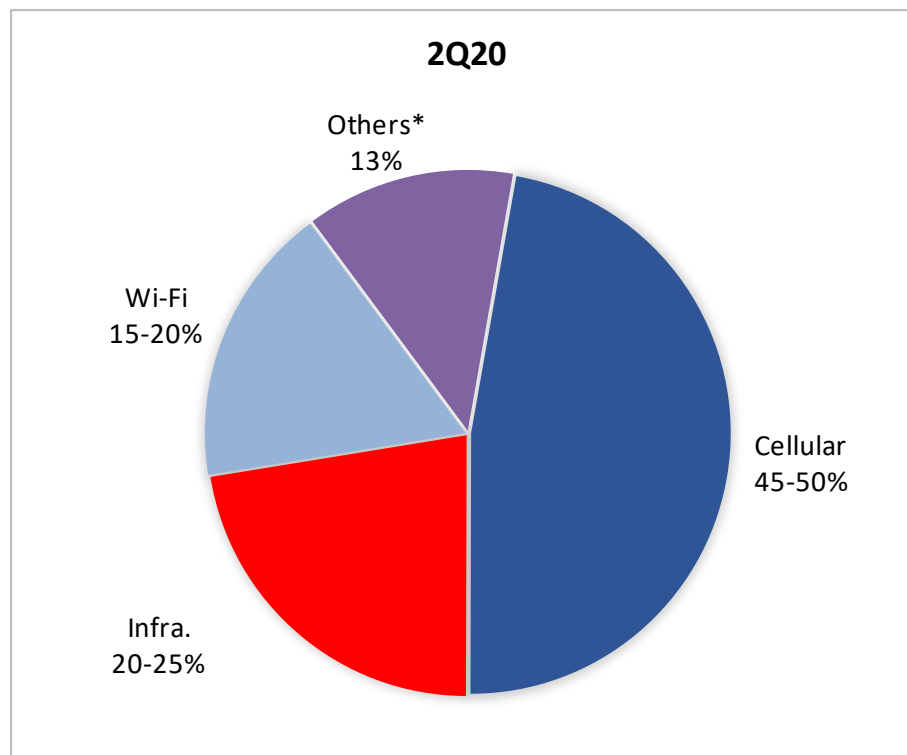
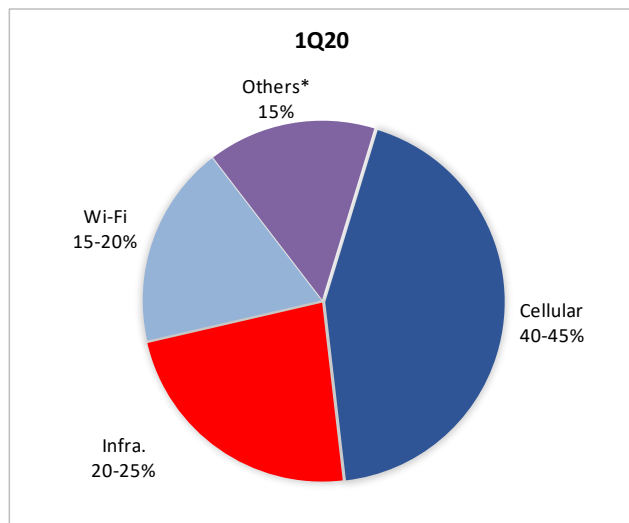
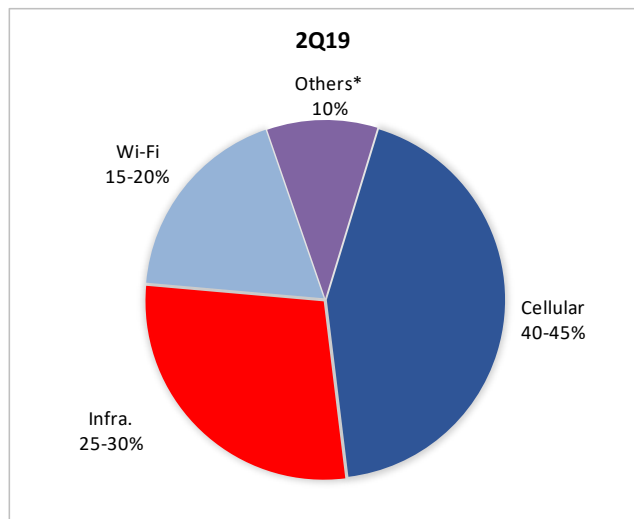
自由現金流量及負債趨勢

- 第二季資本支出持續增加，故自由現金流量呈現淨流出。
- 第二季計息負債及負債比率雖高於前一季，但財務結構仍十分穩健。



* Gearing = interest-bearing debts / equity
Source: company.

產品組合



* Others: 未歸屬於以上主要產品別之營收，以及因應IFRS要求而併入集團之合併營收

Source: company.

- 預計第三季營收將較前一季成長 **mid-single digit**百分比。
- 預計第三季毛利率約為 **low-forties** 的水準。

附件 – 財務狀況

合併綜合損益表 - 第二季

(新台幣 百萬元)	2Q'19	1Q'20	2Q'20 (自結數)	QoQ	YoY
營業收入	4,451	6,071	6,048	-0.4%	+36%
營業毛利	1,513	2,611	2,707	+4%	+79%
營業毛利率(%)	34.0%	43.0%	44.8%		
營業費用	(595)	(673)	(674)	+0.1%	+13%
營業費用率(%)	-13%	-11%	-11%		
營業淨利	918	1,938	2,033	+5%	+122%
營業淨利率(%)	20.6%	31.9%	33.6%		
營業外收支淨額	82	26	(3)		
稅前淨利	999	1,965	2,030	+3%	+103%
所得稅費用	(226)	(389)	(380)		
本期淨利	774	1,575	1,651	+5%	+113%
淨利率(%)	17.4%	25.9%	27.3%		
每股純益(元)	1.87	3.76	3.94	+5%	+111%
其他綜合損益(稅後淨額)	415	(3)	606		
綜合損益總額	1,189	1,572	2,256	+44%	+90%
年化ROE(%)	12%	22%	22%		
約當產能利用率 (%)	80%	90%	90%		
折舊費用	842	841	868		
資本支出	1,669	1,322	1,938		

合併綜合損益表 - 上半年

(新台幣 百萬元)	2019H1	2020H1 (自結數)	YoY
營業收入	8,070	12,119	+50%
營業毛利	2,416	5,318	+120%
營業毛利率(%)	29.9%	43.9%	
營業費用	(1,198)	(1,347)	+12%
營業費用率(%)	-15%	-11%	
營業淨利	1,218	3,971	+226%
營業淨利率(%)	15.1%	32.8%	
營業外收支淨額	(26)	23	
稅前淨利	1,192	3,995	+235%
所得稅費用	(267)	(769)	
本期淨利	924	3,226	+249%
淨利率(%)	11.5%	26.6%	
每股純益(元)	2.28	7.70	+238%
其他綜合損益(稅後淨額)	1,474	603	
綜合損益總額	2,399	3,829	+60%
年化ROE(%)	7%	21%	
約當產能利用率 (%)	65%	90%	
折舊費用	1,668	1,709	
資本支出	2,489	3,260	

營業外收支

(新台幣 百萬元)	2Q'19	2Q'20 (自結數)	2019H1	2020H1 (自結數)
外幣兌換損益	42	(65)	44	(2)
處分不動產、廠房及設備損益	-	0.3	(1)	(1)
處分投資損益	105	-	80	-
透過損益按公允價值衡量之金融資產及負債淨損益	(119)	(11)	(78)	(67)
採用權益法認列之關聯企業及合資損益之份額	(10)	21	(189)	15
其他	64	52	119	78
總計	82	(3)	(26)	23

合併資產負債表

(新台幣 百萬元) 重要科目	2019/6/30		2020/3/31		2020/6/30 (自結數)	
	\$	%	\$	%	\$	%
現金及約當現金	4,206	11%	4,812	11%	6,159	13%
透過損益按公允價值衡量之金融資產-流動	103	0.3%	587	1%	1,033	2%
應收票據及帳款淨額	1,855	5%	2,297	5%	2,318	5%
存貨	4,438	12%	4,977	12%	5,347	11%
長期投資	4,760	13%	6,342	15%	7,150	15%
不動產、廠房及設備	20,358	54%	22,112	51%	23,058	49%
資產總計	37,434	100%	42,996	100%	47,169	100%
流動負債	6,287		9,178		8,906	
長期借款	4,780		4,833		6,187	
負債總額	11,567	31%	14,533	34%	15,629	33%
普通股股本	4,241		4,241		4,241	
歸屬於母公司業主之權益	25,723		28,299		30,596	
權益總計	25,867	69%	28,463	66%	31,540	67%
每股淨值(元) ¹	60.66		66.73		72.15	
重要財務指標						
流動比率	175%		142%		172%	
負債比率	31%		34%		33%	

¹ 每股淨值=歸屬於母公司業主權益/普通股股數

Q & A

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